

Type of file: table

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Multiplex	A-R	AB	CD	E	FGHI	J	KLMN	O1	O2	PQ	R1	R2
SNPs Tested	M9	M168C	M168T	M96C	M89T	M304C	M9C	M175-	M175-	M45A	M207G	M343A
	M45	M31	M89C	DYS391	M9G	M47	M45G	M122T	M122C	M207	M343C	M18
	M89	M32	M96G	M2	M304A	M67	M175+	M88	M7	M3	M17	M37
	M96	M42	M15	M33	M26	M92	M5	M95	M113	M19	M56	M65
	M122	M150	M38	M35	M52	M172	M11	M101	M117	M120	M87	M126
	M168	M146	M48	M58	M170	M241	M70	M103	M121	M143	M124	M153
	M175	M182	M55	M75	M201	M267	M178	M119	M134	M194	M157	M269
	M207	P4	M125	M78	M253		M214	P31	M159	M199	M173	P25
	M304		M130	M81	P15		M231	SRY465	M164	M242	SRY10831	SRY-2627
	M343		M131	M123	P16		SRY9138			M323		
	AmelXY		M145		P37		Tat					
			M151									
			M210									
			M217									

Supplementary Table 1: Polymorphic loci in the Y-SNP Identification System (Marligen-Biosciences)

Type of file: table

Label: 2

Filename: table_2.doc

Supplementary Table 2

A. Worldwide populations included in the autosomal analysis of Bedouin population substructure

Population	<i>n</i>	Source
Ajman	39	Current Study
Murrah	5	Current Study
Shimar	21	Current Study
Awazim	37	Current Study
Mutran	30	Current Study
Aniza	21	Current Study
Egypt-Adima Muslims	99	Coudray <i>et al.</i> , 2007
Egypt-Copts	100	Coudray <i>et al.</i> , 2007
Belgium	222	Decorte <i>et al.</i> , 2004
Iraq	103	Barni <i>et al.</i> , 2007
Qatar	133	Perez-Miranda <i>et al.</i> , 2006

B. Populations used in the MDS plot based on nine Y-STR loci

Group	Source
Aniza	Current Study
Awazim	Current Study
Mutran	Current Study
Shimar	Current Study
Ajman	Current Study
Malaysian	Chang <i>et al.</i> , 2007
Caceras Central Spain	Lopez <i>et al.</i> , 2004; Roewer <i>et al.</i> , 2005; Roewer <i>et al.</i> , 2001
Andalucia	Martinez-Jarreta <i>et al.</i> , 2003; Roewer <i>et al.</i> , 2001
Austrian	Berger <i>et al.</i> , 2005
Central Poland	Rebala and Szczerkowska, 2005
Zriba	Cherni <i>et al.</i> , 2005; Roewer <i>et al.</i> , 2001
Berber	Cherni <i>et al.</i> , 2005; Roewer <i>et al.</i> , 2001
Tunis	Cherni <i>et al.</i> , 2005; Roewer <i>et al.</i> , 2001
Somalia	Hallenberg <i>et al.</i> , 2005
Andalusian Arabs	Cherni <i>et al.</i> , 2005; Roewer <i>et al.</i> , 2001
Korea	Kim <i>et al.</i> , 2001
Turkey	Henke <i>et al.</i> , 2001; Roewer <i>et al.</i> ,

2001

Yemen Cadenas *et al.*, 2007

United Arab Emirates (UAE) Cadenas *et al.*, 2007

Qatar Cadenas *et al.*, 2007

C. Populations used in the Y-SNP Haplogroup MDS plot

Population	Source
Ajman	Current Study
Shimar	Current Study
Awazim	Current Study
Mutran	Current Study
Aniza	Current Study
North Iran	Regueiro <i>et al.</i> , 2006
Sourth Iran	Regueiro <i>et al.</i> , 2006
Ethiopia	Cruciani <i>et al.</i> , 2002 Hammer <i>et al.</i> , 2000; Semino <i>et al.</i> , 2004; Semino <i>et al.</i> , 2000;
Lebanon	Wells <i>et al.</i> , 2001 Cruciani <i>et al.</i> , 2004; Di Giacomo <i>et al.</i> , 2004; Flores, 2005; Hammer <i>et al.</i> , 2000; Semino <i>et al.</i> ,
Syria	2000 Al-Zahery <i>et al.</i> , 2003;
Iraq	Sanchez <i>et al.</i> , 2005
Turkey	Cinnioglu <i>et al.</i> , 2004
Egypt	Luis <i>et al.</i> , 2004
Oman	Luis <i>et al.</i> , 2004
Andalusia	Semino <i>et al.</i> , 2000
Saami	Semino <i>et al.</i> , 2000
Udmurt	Semino <i>et al.</i> , 2000
Mari	Semino <i>et al.</i> , 2000

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Type of file: table

Label: 3

Filename: table_3.doc

Population	Dubai	Saudi	Omanis	Yemenite	Iranians	Egyptian-Muslims	Egyptian-Copts	Malaysian-Malay	Malaysian-Chinese	Malaysian-Indians	Belgium	Korean	Qatari	Iraqi	Aniza	Awazim	Ajman/Murrah	Shimar	Mutran
Dubai	0.0000																		
Saudi	0.0003	0.0000																	
Omanis	0.0000	0.0003	0.0000																
Yemenite	0.0019	0.0000	0.0000	0.0000															
Iranians	0.0000	0.0010	0.0000	0.0044	0.0000														
Egyptian-Muslims	0.0026	0.0048	0.0000	0.0040	0.0053	0.0000													
Egyptian-Copts	0.0103	0.0133	0.0068	0.0114	0.0122	0.0068	0.0000												
Malaysian-Malay	0.0130	0.0177	0.0148	0.0144	0.0079	0.0180	0.0286	0.0000											
Malaysian-Chinese	0.0175	0.0209	0.0192	0.0194	0.0114	0.0185	0.0283	0.0028	0.0000										
Malaysian-Indians	0.0089	0.0121	0.0101	0.0124	0.0048	0.0162	0.0237	0.0132	0.0169	0.0000									
Belgium	0.0214	0.0228	0.0215	0.0275	0.0146	0.0272	0.0265	0.0303	0.0337	0.0248	0.0000								
Korean	0.0167	0.0209	0.0167	0.0194	0.0109	0.0176	0.0261	0.0061	0.0000	0.0122	0.0305	0.0000							
Qatari	0.0015	0.0000	0.0004	0.0000	0.0000	0.0027	0.0120	0.0149	0.0182	0.0107	0.0221	0.0176	0.0000						
Iraqi	0.0018	0.0000	0.0033	0.0009	0.0033	0.0069	0.0113	0.0159	0.0194	0.0127	0.0239	0.0197	0.0020	0.0000					
Aniza	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0015	0.0000	0.0035	0.0037	0.0138	0.0024	0.0000	0.0000	0.0000				
Awazim	0.0088	0.0005	0.0086	0.0086	0.0070	0.0107	0.0209	0.0193	0.0261	0.0181	0.0293	0.0273	0.0000	0.0063	0.0000	0.0000	0.0000		
Ajman & Murrah	0.0056	0.0000	0.0031	0.0000	0.0061	0.0042	0.0097	0.0171	0.0197	0.0189	0.0295	0.0215	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Shimar	0.0000	0.0000	0.0000	0.0000	0.0014	0.0000	0.0129	0.0118	0.0158	0.0141	0.0262	0.0183	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Mutran	0.0000	0.0000	0.0000	0.0000	0.0018	0.0000	0.0045	0.0118	0.0133	0.0058	0.0228	0.0120	0.0000	0.0000	0.0054	0.0000	0.0000	0.0000	

Supplementary Table 3 F_{st} values estimated from frequency data at thirteen autosomal-STR s

Type of file: table

Label: 4

Filename: table_4.doc

Supplementary Table 4. Proportion of membership of each pre-defined population in each of the three clusters

Population	<i>n</i>	% membership		
		K 1	K 2	K 3
Ajman	39	21	62	17
Murrah	5	11	74	15
Shimar	21	21	48	31
Awazim	37	7	77	16
Mutran	30	7	63	30
Aniza	21	34	37	29
Egypt-Adima Muslims	99	63	19	18
Egypt-Copts	100	65	14	21
Belgium	222	22	22	56
Iraq	103	26	38	36
Qatar	133	24	45	31

Type of file: table

Label: 5

Filename: table_5.doc

**Y-STR haplotypes affiliated with binary haplogroups in six Bedouin samples
analysed**

A. Aniza

Haplotype Number	Haplotype Number	Allele status at														
		DYS456	DYS398a	DYS390	DYS389b	DYS458	DYS19	DYS393	DYS391	DYS439	DYS635	DYS392	YGATAH4	DYS437	DYS438	DYS448
ANZ1	E3b1	15	14	25	17	16	14	13	10	13	20	11	12	14	10	20
ANZ2	G2*	15	12	22	17	17	15	14	10	12	22	10	13	15	11	21
ANZ3	G2*	16	12	22	18	16	15	14	10	11	21	11	12	15	10	21
ANZ4	G2*	16	12	24	17	18	11	13	10	11	21	13	10	16	10	21
ANZ5	J1	15	13	23	17	18	14	12	11	11	21	11	11	14	10	20
ANZ6	J1	14	13	23	16	18	14	12	11	11	22	11	10	14	10	20
ANZ7	J1	14	13	23	17	20	14	12	11	11	21	11	11	14	10	20
ANZ8	J1	15	14	23	17	18	14	12	10	11	21	11	11	14	10	20
ANZ9	J1	15	13	23	17	18	14	12	11	10	21	11	11	14	10	20
ANZ10	J1	15	13	23	17	18	14	12	12	10	21	11	11	14	10	20
ANZ11	J1	14	13	23	17	19	14	12	11	11	21	11	11	14	10	20
ANZ12	J1	14	13	23	16	18	14	12	11	11	21	11	12	14	10	20
ANZ13	J1	17	14	23	16	17	14	12	10	10	21	11	11	15	9	20
ANZ14	J1	13	13	22	16	20	14	12	10	11	21	11	11	14	10	20
ANZ15	J1	17	14	23	16	17	15	12	10	10	21	11	11	15	9	20
ANZ16	J1	17	14	23	16	17	14	12	10	10	21	11	11	15	9	20
ANZ17	J1	14	12	23	17	18	14	12	11	11	21	11	11	14	10	20
ANZ18	K2	15	14	23	17	17	14	13	10	11	21	13	11	14	9	19
ANZ19	R1a1*	17	14	25	17	16	16	13	10	9	13	11	11	14	11	20
ANZ20	R1b3*	17	13	24	16	17	14	12	10	11	24	13	12	16	12	19
ANZ21	R1b3*	17	13	24	16	17	14	12	10	11	24	13	12	16	12	19

B. Awazim

Haplotype Number	Haplogroup	Allele status at														
		DYS456	DYS398a	DYS390	DYS389b	DYS458	DYS19	DYS393	DYS391	DYS439	DYS635	DYS392	YGATAH4	DYS437	DYS438	DYS448
AZM1	E3b3	16	13	24	18	18	15	13	10	12	21	11	11	14	10	20
AZM2	E3b3	16	13	24	18	19	14	13	10	12	21	11	10	14	10	20
AZM3	E3b3	17	13	24	18	18	14	13	10	12	21	11	11	14	10	20
AZM4	E3b3	14	14	23	17	18	14	12	11	12	21	11	11	14	10	19
AZM5	E3b3	16	13	24	18	18	14	13	10	12	21	11	11	14	12	20
AZM6	E3b3	16	13	24	18	18	14	13	10	12	21	11	11	14	10	20
AZM7	E3b3	15	13	24	18	18	14	13	10	12	22	11	11	14	10	20
AZM8	E3b3	16	13	24	18	19	14	13	10	12	21	11	10	14	10	20
AZM9	E3b3	16	13	24	17	18	15	13	10	12	21	11	11	14	10	20
AZM10	J1	14	13	23	17	20	14	12	10	11	21	11	11	14	10	21
AZM11	J1	14	13	24	17	18	14	12	11	11	20	11	11	14	10	20
AZM12	J1	14	13	23	17	18	14	12	11	11	21	11	11	14	10	20
AZM13	J1	14	13	23	17	20	14	12	12	12	21	11	11	14	10	20
AZM14	J1	14	13	23	17	18	14	13	11	11	21	11	11	14	10	20
AZM15	J1	14	13	23	17	18	14	12	11	12	21	11	11	14	10	20
AZM16	J1	14	12	23	17	18	14	12	11	12	21	11	11	14	10	20
AZM17	J1	14	13	23	17	20	14	12	11	12	21	11	11	14	10	20
AZM18	J1	14	13	23	16	18	14	12	11	11	21	11	11	15	10	20
AZM19	J1	15	13	23	16	17	14	12	10	11	20	11	11	14	10	20
AZM20	J1	14	13	23	17	19	14	12	11	11	21	11	11	14	10	20
AZM21	J1	14	13	23	18	18	14	12	11	12	21	11	11	14	10	20
AZM22	J1	15	13	23	6	19	14	12	11	12	21	11	11	14	10	20
AZM23	J1	14	13	23	17	19	14	12	11	12	21	11	11	14	10	20
AZM24	J1	14	13	23	16	19	14	12	11	11	21	11	11	14	10	20
AZM25	J1	14	13	23	17	18	14	12	11	12	21	11	11	14	10	20
AZM26	J1	14	13	23	17	20	14	12	12	12	21	11	11	14	10	20
AZM27	J1	15	13	23	16	19	14	12	11	12	21	11	11	14	10	20
AZM28	J1	14	13	23	16	18	14	12	11	12	21	11	11	14	10	20
AZM29	J1	14	14	23	17	20	14	12	12	12	21	11	11	14	10	20
AZM30	J1	14	13	23	17	20	14	12	12	12	21	11	11	14	10	20
AZM31	J1	14	13	23	17	20	14	12	12	12	21	11	11	14	10	20
AZM32	J1	14	13	23	17	20	14	12	12	12	21	11	11	14	10	20
AZM33	J1	14	13	23	17	18	14	12	11	12	21	11	11	14	10	20
AZM34	J1	14	13	23	17	18	14	12	11	12	21	11	11	14	10	20
AZM35	J1	14	13	23	17	18	14	12	11	12	21	11	11	14	10	20
AZM36	J1	14	13	23	17	18	14	13	11	11	21	11	11	14	10	20
AZM37	R2	18	13	23	15	18	14	13	10	11	25	10	12	16	11	19

C. Mutran

Haplotype Number	Haplogroup	Allele status at														
		DYS456	DYS389a	DYS390	DYS389b	DYS458	DYS19	DYS393	DYS391	DYS439	DYS635	DYS392	YGATAH4	DYS437	DYS438	DYS448
MUT1	G2*	14	13	23	17	18	14	12	11	11	22	11	11	14	10	20
MUT2	J1	14	13	23	16	20	14	12	11	11	21	11	11	14	10	20
MUT3	J1	14	13	23	17	18	14	12	11	11	22	11	11	14	10	20
MUT4	J1	14	13	23	17	18	14	12	11	11	20	11	11	14	10	20
MUT5	J1	14	13	23	17	19	14	12	10	11	21	11	11	14	10	20
MUT6	J1	14	13	23	17	18	14	12	11	11	21	11	11	14	10	20
MUT7	J1	14	13	23	17	20	14	12	11	11	21	11	11	14	10	20
MUT8	J1	14	13	23	17	19	14	12	11	11	21	11	11	14	10	20
MUT9	J1	14	13	23	17	18	14	12	11	11	21	11	11	14	10	20
MUT10	J1	14	13	23	16	19	14	12	11	11	21	11	11	14	10	20
MUT11	J1	15	13	23	17	18	14	12	11	11	21	11	11	14	10	20
MUT12	J1	14	13	23	17	19	14	12	11	11	21	11	11	14	10	20
MUT13	J1	15	13	24	18	18	14	13	10	12	21	11	11	14	10	20
MUT14	J1	14	13	23	17	18	14	12	11	11	21	11	11	14	10	20
MUT15	J1	14	13	23	17	19	14	12	11	11	21	11	11	14	10	20
MUT16	J1	14	13	23	17	19	14	12	11	12	21	11	11	14	10	20
MUT17	J1	14	13	23	16	20	14	12	11	11	21	11	11	14	10	20
MUT18	J1	14	13	23	17	18	14	12	11	11	21	11	11	14	10	20
MUT19	J1	14	13	23	17	18	14	12	11	11	21	11	11	14	10	20
MUT20	J1	15	12	23	17	18	16	14	11	11	21	11	12	16	12	21
MUT21	J1	14	13	23	17	18	14	12	11	11	22	11	11	14	10	20
MUT22	J1	15	13	25	20	15	14	13	10	12	21	11	12	14	10	20
MUT23	J1	14	13	23	17	20	14	12	11	12	21	11	11	14	10	20
MUT24	J1	14	13	23	17	18	14	12	11	11	21	11	11	14	10	20
MUT25	J1	14	13	23	17	18	14	12	11	11	21	11	11	14	10	20
MUT26	J1	14	13	23	17	19	14	12	11	11	21	11	11	14	10	20
MUT27	J1	14	13	23	17	18	14	12	11	11	21	11	10	14	10	20
MUT28	J1	15	14	23	16	18	15	13	11	13	24	13	12	14	11	20
MUT29	J1	14	13	23	17	18	14	12	11	11	22	11	11	14	10	20
MUT30	Q*	16	13	22	16	19	12	13	10	13	22	15	11	14	11	19

D. Shimar

Haplotype Number	Haplogroup	Allele status at														
		DYS456	DYS389a	DYS390	DYS389b	DYS458	DYS19	DYS393	DYS391	DYS439	DYS635	DYS392	YGATAH4	DYS437	DYS438	DYS448
SHR1	G2*	14	13	23	16	19	14	12	12	11	21	11	11	14	10	20
SHR2	J1	14	13	23	17	18	14	12	11	10	20	11	11	14	10	20
SHR3	J1	14	13	23	16	15	14	12	11	11	21	11	11	14	10	20
SHR4	J1	14	13	23	16	18	14	12	11	11	21	11	11	13	10	20
SHR5	J1	16	14	24	17	16	15	12	11	10	23	11	12	14	11	20
SHR6	J1	14	13	23	17	18	14	13	11	11	21	11	11	14	10	20
SHR7	J1	14	13	23	16	19	14	12	11	11	21	11	11	14	10	20
SHR8	J1	14	14	23	16	18	14	12	12	12	21	11	11	14	10	20
SHR9	J1	15	13	21	17	17	15	14	11	11	21	11	11	16	10	23
SHR10	J1	16	14	25	17	16	15	12	11	10	23	11	12	14	11	19
SHR11	J1	14	13	23	17	18	14	13	11	11	21	11	11	14	10	20
SHR12	J1	14	14	25	17	17	14	12	11	11	23	12	12	17	9	19
SHR13	R1a1*	16	14	24	17	16	15	12	11	10	23	11	12	14	11	20
SHR14	R1a1*	16	14	24	17	16	15	12	11	10	23	11	12	14	11	20
SHR15	R1a1*	14	13	23	17	18	14	13	11	11	21	11	11	14	10	20
SHR16	R1a1*	16	14	24	17	16	15	12	11	10	23	11	12	14	11	20
SHR17	R1a1*	15	13	21	17	16	15	14	10	12	21	11	11	14	11	21
SHR18	R1a1*	16	14	24	17	16	15	12	11	10	23	11	12	14	11	20
SHR19	R1a1*	16	14	24	17	15	15	12	11	10	23	11	12	14	11	20
SHR20	R1a1*	16	13	24	17	17	13	14	11	13	22	11	12	14	10	20
SHR21	R1a1*	14	13	23	17	18	15	12	11	11	21	11	11	14	10	20

E. Ajman

Haplotype Number	Haplogroup	Allele status at														
		DYS456	DYS389a	DYS390	DYS389b	DYS458	DYS19	DYS393	DYS391	DYS439	DYS635	DYS392	YGATAH4	DYS437	DYS438	DYS448
AJM1	J1	14	13	24	17	18	14	12	11	12	21	11	11	14	10	20
AJM2	J1	14	13	23	17	18	14	12	11	11	21	11	11	14	10	20
AJM3	J1	14	14	23	17	18	14	12	11	11	21	11	12	14	10	19
AJM4	J1	14	13	23	17	18	14	12	11	11	20	11	11	14	10	19
AJM5	J1	14	13	23	16	18	14	12	11	12	21	11	11	14	10	19
AJM6	J1	14	13	23	17	18	14	12	12	12	21	11	11	14	10	19
AJM7	J1	14	13	23	17	18	14	12	11	11	20	11	11	14	10	19
AJM8	J1	14	13	23	17	18	14	12	11	11	21	11	11	14	10	19
AJM9	J1	14	13	23	16	18	14	12	11	11	21	11	11	14	10	20
AJM10	J1	14	13	23	17	18	14	12	11	11	22	11	11	14	10	19
AJM11	J1	13	13	22	16	19	14	12	11	11	21	11	11	14	10	20
AJM12	J1	14	13	23	17	19	14	12	11	11	20	11	11	14	10	19
AJM13	J1	14	13	23	17	18	14	12	11	11	20	11	11	14	10	19
AJM14	J1	13	13	22	16	18	14	12	11	11	21	11	11	14	10	19
AJM15	J1	14	13	23	17	18	14	12	11	11	22	11	11	14	10	19
AJM16	J1	14	13	23	17	18	14	12	11	11	20	11	11	14	10	19
AJM17	J1	14	14	23	17	18	14	12	11	11	22	11	11	14	10	19
AJM18	J1	14	13	23	18	18	14	12	12	11	21	11	11	14	10	19
AJM19	J1	14	13	23	17	18	14	12	11	11	22	11	11	14	10	19
AJM20	J1	14	13	23	17	18	14	12	11	11	22	11	11	14	10	19
AJM21	J1	14	13	23	17	18	14	12	12	12	21	11	11	14	10	19
AJM22	J1	14	13	23	18	18	14	12	11	11	21	11	11	14	10	19
AJM23	J1	14	13	23	16	18	14	12	11	11	21	11	11	14	10	20
AJM24	J1	14	13	23	17	18	14	12	11	11	21	11	11	14	10	19
AJM25	J1	14	13	23	17	18	14	12	11	11	22	11	11	14	10	19
AJM26	J1	14	13	23	16	18	14	12	11	11	21	11	11	14	10	20
AJM27	J1	13	13	23	17	19	14	12	12	11	21	11	11	14	10	19
AJM28	J1	14	13	23	16	18	13	12	10	11	21	11	11	14	10	20
AJM29	J1	14	13	23	17	18	14	12	11	11	21	11	11	14	10	19
AJM30	J1	14	13	23	17	18	14	12	11	11	21	11	11	14	10	19
AJM31	J1	14	13	23	17	18	14	12	11	11	21	11	11	14	10	18
AJM32	J1	14	13	23	17	18	14	12	11	11	20	11	11	14	10	19
AJM33	J1	13	13	23	17	19	14	12	11	11	21	11	11	14	10	19
AJM34	J1	14	13	23	16	18	13	12	10	11	21	11	11	14	10	20
AJM35	J1	14	13	24	16	18	13	12	11	11	21	11	11	14	10	20
AJM36	J1	14	13	23	17	18	14	12	11	11	21	11	11	14	10	19
AJM37	J1	14	13	23	17	18	14	12	11	11	20	11	11	14	10	19
AJM38	J1	14	13	23	17	18	13	12	11	11	22	11	11	14	10	20
AJM39	J1	14	13	23	17	18	13	12	11	11	22	11	11	14	10	20

Identifier 15-STR haplotypes in six Bedouin samples analysed

A. Ajman & Murrah

Haplotype Number	CSF1PO	D13S317	D16S539	D18S51	D19S433	D21S11	D2S138	D3S1358	D5S818	D7S820	D8S1179	FGA	TH01	TPOX	vWA
AJM1	12\12	10\13	11\11	15\17	14\16.2	29\32.2	16\17	15\17	11\11	9\13	11\15	24\25	6\9	11\11	16\18
AJM2	9\10	8\12	9\9	18\19	13\16	30\30	17\17	16\18	13\13	10\10	11\15	23\23	6\10	8\11	15\17
AJM3	11\12	11\12	11\12	14\15.2	14\15	29\30	18\25	16\17	11\13	8\10	12\13	21\24	6\8	8\9	14\16
AJM4	11\12	12\14	11\12	14\16	15.2\16	29\31	18\20	15\17	9\12	10\11	13\14	18\23	6\7	8\8	15\17
AJM5	11\12	11\11	9\10	11\12	12\15	29\31.2	18\18	16\17	11\13	10\12	14\14	20.2\25	9\9	8\8	16\16
AJM6	11\13	12\13	11\11	13\16	13\15	30\32.2	20\20	15\17	10\12	12\12	12\12	23\24	6\9	8\10	17\17
AJM7	11\12	8\11	10\11	13\13	14\15.2	30\33.2	20\21	15\17	11\12	10\12	12\15	23\24	8\10	11\11	16\17
AJM8	12\13	13\13	12\13	13\17	15\16	29\31	16\26	16\17	11\13	7\10	11\15	18\23	6\9	8\9	16\16
AJM9	10\12	8\12	11\11	13\13	14\15	28\30	18\18	15\16	12\12	10\13	14\15	21\25	7\9	8\10	16\17
AJM10	10\12	11\11	11\12	15\19	14\15	30\30	19\23	14\15	11\11	10\11	13\13	23\24	8\10	8\8	17\18
AJM11	10\12	14\14	11\13	12\17	12\13	29\29	17\20	16\17	12\13	8\10	11\14	21\23	6\7	11\11	18\18
AJM12	10\10	12\12	9\11	12\13	14\14	28\30	17\24	15\15	11\12	10\12	14\14	20\23	6\9	8\8	16\18
AJM13	10\11	9\12	10\13	14\14	14\15	31\32.2	18\19	16\18	10\13	10\10	12\15	23\24	10\10	11\11	16\18
AJM14	10\12	12\13	11\11	12\12	13\15	28\30	19\19	18\18	11\13	9\12	13\15	21\23	6\7	8\11	16\16
AJM15	10\12	8\12	9\11	14\17	14\15.2	29\30	21\24	15\17	12\13	10\10	15\15	22\23	10\10	8\8	15\16
AJM16	12\12	12\13	11\13	13\13	14\15	29\30	17\25	17\18	11\12	10\12	13\13	23\24	6\8	8\9	15\20
AJM17	10\11	8\12	11\12	15\16	15\16.2	30\32.2	17\23	17\17	13\15	8\10	13\15	24\25	7\9	8\8	15\17
AJM18	10\13	13\13	11\13	13\14	15\16	29\31	16\20	16\18	11\13	7\11	9\15	18\27	7\9	9\10	15\16
AJM19	10\12	11\11	10\11	13\18	12\16	28\28	16\20	17\18	11\12	10\12	14\15	20\26	9\10	8\11	16\19
AJM20	12\12	8\12	8\11	11\12	13\13.2	31.2\32.2	17\23	17\17	12\13	9\10	11\15	18\24	6\7	8\9	16\17
AJM21	12\14	13\14	9\11	14\17	15\16	29\30	17\17	15\16	10\10	11\12	11\15	20.2\24	6\9	11\11	17\17
AJM22	10\10	11\13	13\14	16\17	13\16	29\29	16\19	15\16	10\11	10\10	13\15	20\23	10\10	8\11	16\16
AJM23	11\12	8\12	11\11	12\14	12\15	32.2\32.2	17\23	15\17	12\13	10\10	14\15	18\24	6\7	9\9	16\16
AJM24	11\12	8\13	8\9	12\13	12\15.2	32.2\32.2	20\23	16\18	12\13	10\12	11\13	21\24	7\8	8\10	16\18
AJM25	11\12	11\11	12\13	17\20	14\17.2	30\34.2	16\23	16\17	13\13	8\10	11\13	20\22	6\6	9\9	18\18
AJM26	10\12	12\13	11\12	13\18	14\16	29\30	18\18	16\18	11\13	8\11	14\15	20\22	7\9	8\8	16\16
AJM27	10\11	8\8	11\13	12\18	12\15	29\32.2	17\18	16\16	9\12	10\13	14\15	23\25	6\10	8\10	14\18
AJM28	10\13	12\13	11\12	14\17	14\14.2	28\29	19\21	15\17	10\11	10\10	13\15	20\25	6\7	8\10	15\17
AJM29	10\12	8\12	11\12	12\13	14\14	28\33.2	16\17	16\17	10\12	8\8	11\15	22\22	6\10	8\8	16\17
AJM30	10\12	12\13	9\10	12\13	16\16	30\30	16\24	17\17	10\12	10\12	15\15	20\23	7\9	8\8	18\19
AJM31	10\12	12\13	11\13	12\13	14\18	30\32.2	16\19	15\18	11\13	9\11	15\15	20.2\24	7\10	8\8	15\19
AJM32	12\12	11\12	11\11	15\17	15\16	28\31.2	17\20	14\17	11\13	10\12	10\11	19\25	9\9	8\12	14\16
AJM33	10\12	10\11	9\12	12\13	13\16	29\32.2	17\20	15\16	11\12	10\12	12\15	22\25	7\10	8\9	15\16
AJM34	10\12	12\14	8\9	12\14	12\14	28\31	17\18	16\18	10\12	10\12	15\16	22\24	8\9	9\11	16\17
AJM35	10\12	11\13	8\11	12\20	15\16.2	29\32.2	22\23	15\16	9\13	11\11	11\14	24\25	6\9	10\11	17\18
AJM36	10\12	8\12	12\13	12\13	14\15	28\33.2	16\16	15\17	10\10	8\8	9\12	20\22	9\9	8\10	15\17
AJM37	11\12	11\12	11\12	14\15.2	14\15	29\30	18\25	16\17	11\13	8\8	12\13	21\24	6\8	8\9	14\16
AJM38	11\11	8\12	9\10	13\15	14\16	29\30	16\20	15\15	9\10	10\10	14\15	18\22	10\10	8\8	17\18
AJM39	9\12	8\12	8\13	13\15	14\16.2	30\30	18\20	17\18	9\12	10\10	13\15	21\22	9\10	8\8	16\17
MUR1	11\12	10\13	8\12	13\18.2	14\15	28\32.2	16\16	16\17	11\13	8\10	12\13	22\26	5.3\5.3	8\8	16\18
MUR2	12\13	12\12	10\11	14\18	13\15	29\29	17\17	15\17	11\11	8\9	13\15	20\22.2	5.3\7.3	8\8	17\19
MUR3	10\11	10\10	9\11	12\15	14\14	28\30	17\19	16\17	12\12	10\10	15\16	21\23	5.3\6.3	8\11	16\19
MUR4	11\11	12\13	11\11	12\13	14.2\15.2	30\30	16\21	15\16	13\13	9\10	13\13	22\23	8.3\9.3	8\8	20\20
MUR5	11\11	10\10	12\13	13\14	13\14	29\30	19\20	17\17	10\12	8\8	13\14	22\24	9.3\9.3	8\8	16\19

B. Shimar

Haplotype Number	CSF1PO	D13S317	D16S539	D18S51	D19S433	D21S11	D21S1338	D3S1358	D5S818	D7S820	D8S1179	FGA	TH01	TPOX	vWA
SHR2	10\12	11\13	11\11	13\15	13\14	29\31.2	20\21	14\16	11\15	10\10	13\15	21\23	7\10	8\11	15\18
SHR3	10\10	9\12	11\12	14\14	12\13.2	27\29	20\24	14\16	9\10	10\11	12\14	23\25	7\10	8\9	16\17
SHR4	10\11	11\12	10\10	12\16	14\16	29\31.2	18\23	15\17	10\10	8\9	12\15	21\22	9\10	8\10	16\17
SHR5	11\11	12\12	11\11	12\18	13\14	29\31	23\25	16\18	11\13	10\13	12\15	23\27	6\8	8\11	15\17
SHR6	10\11	10\12	11\12	13\13	14\14	30\30	17\21	15\17	11\12	8\10	11\15	20\21	9\9	8\10	16\18
SHR7	8\8	9\11	9\13	13\15	15\16.2	29\31.2	18\20	14\16	11\13	8\11	12\14	23\23	7\7	8\9	17\18
SHR8	10\12	9\12	11\12	14\14	13\14	29\33.2	16\20	14\16	12\12	9\12	12\14	20\23	9\10	8\8	16\16
SHR9	10\12	11\12	10\10	12\12	14\14	27\36	19\19	15\17	12\12	10\10	12\14	21\21	7\7	9\11	16\16
SHR10	10\11	8\11	12\12	13\14	13\16	29\30	18\20	15\17	11\12	10\12	14\14	23\25	6\9	8\12	16\17
SHR11	12\12	11\12	11\13	14\22	13\15	29\30	17\21	16\17	11\12	8\9	10\12	23\24	6\9	8\8	16\17
SHR12	10\11	11\11	12\14	16\19	13.2\15.2	29\30	17\17	17\17	11\11	12\12	12\14	19\23	8\8	8\8	16\18
SHR13	11\11	8\11	10\13	17\17	13\14	31.2\33.2	17\24	17\17	10\13	9\10	13\15	22\25	9\10	9\10	16\19
SHR14	11\12	11\12	9\11	14\15	16\17	28\29	20\25	16\17	10\12	10\12	12\14	18\25	6\7	8\8	17\19
SHR15	12\12	11\13	11\12	13\13	13\14	29\29	20\24	15\18	9\13	9\10	15\17	23\23	6\10	8\11	17\17
SHR16	10\10	8\11	11\12	12\15	13\14	29\30	17\17	17\18	11\12	10\10	8\13	22\25	6\10	8\8	18\19
SHR17	10\11	9\11	9\11	13\13	15\17.2	28\30	18\20	16\16	12\13	10\10	12\13	20\24	6\9	8\8	18\19
SHR18	12\12	8\11	11\11	14\19	14\15	30\32.2	19\21	16\17	10\13	8\9	12\14	20\23	7\9	8\10	16\16
SHR19	10\11	12\12	12\13	13\14	13\13.2	32.2\33.2	19\23	15\17	11\12	9\11	9\13	19\20	8\10	10\11	14\16
SHR20	9\10	10\11	12\13	13\15	14\15.2	29\31.2	16\20	17\18	12\13	8\10	13\14	23\23	6\6	10\11	16\17
SHR21	11\11	8\13	12\12	12\12	14\16	27\29	18\18	15\17	12\13	8\8	12\15	21\22	8\9	8\8	14\16

C. Awazim

Haplotype Number	CSF1PO	D13S317	D16S539	D18S51	D19S433	D21S11	D2S1338	D3S1358	D5S818	D7S820	D8S1179	FGA	TH01	TPOX	vWA
AZM2	10\12	11\12	10\11	13\13	12\14	29\29	17\17	16\17	12\12	9\10	11\12	25\25	6.3\8.3	8\8	15\17
AZM3	12\12	9\11	11\11	13\14	12\12	29\30	17\17	15\17	12\12	8\8	12\16	23\25	8.3\8.3	8\8	15\17
AZM4	13\13	9\13	12\12	13\14	13\14.2	29\30	17\19	16\17	11\12	11\11	13\13	21\25	5.3\7.3	8\9	15\16
AZM5	12\12	12\13	10\11	13\16	13.2\14	29\30	23\23	16\19	11\12	8\11	12\12	22\23	5.3\6.3	8\11	16\16
AZM6	10\12	8\11	11\12	12\14	15\15.2	29\31.2	19\23	16\17	12\12	8\12	10\15	20\21	5.3\6.3	8\9	15\17
AZM7	11\12	10\11	11\11	13\15	12\16.2	28\29	17\23	15\17	10\11	8\9	10\15	23\25	5.3\8.3	8\8	16\17
AZM8	11\12	10\11	12\13	13\13	15\15	29\29	20\20	16\17	11\12	10\11	15\16	23\23	5.3\5.3	9\10	16\17
AZM9	10\10	12\12	10\11	16\17	14\16.2	29\32	17\17	15\17	12\12	10\10	12\13	23\26	5.3\8.3	8\9	17\17
AZM10	11\12	11\14	12\12	13\16	14\17	29\29	17\17	11\16	12\13	10\11	12\15	22\25	6.3\9	9\11	16\16
AZM11	11\12	11\14	11\11	13\15	12\16	31.2\32.2	17\17	18\19	9\11	8\11	15\15	23\24	6.3\6.3	8\9	15\18
AZM12	11\11	10\11	11\12	13\14	15\16.2	29\31.2	16\24	15\17	13\13	10\12	12\12	21\24	5.3\6.3	8\11	14\17
AZM13	12\13	10\12	10\11	13\17	12\14.2	30\32.2	17\20	17\18	11\11	10\11	12\13	21\21	5.3\6.3	9\11	15\16
AZM14	11\11	10\11	11\12	13\16	12\12	29\29	17\18	16\19	11\13	9\10	11\15	23\24	7.3\8.3	9\10	15\16
AZM15	10\12	12\12	11\13	13\13	12\13.2	30\32.2	17\17	17\18	12\13	9\10	12\15	24\25	5.3\5.3	8\9	17\17
AZM16	11\12	13\14	11\13	15\17	13\15	30\30	17\20	14\17	12\13	8\12	11\12	22\23	6.3\10	8\10	15\16
AZM17	10\12	8\14	11\13	13\16	15\15.2	29\31.2	20\24	15\15	12\13	10\13	13\15	22\27	6.3\7.3	8\9	15\17
AZM18	10\11	8\8	12\13	17\19	13\15	29\31	17\18	15\16	9\9	11\12	13\13	23\24	5.3\6.3	8\8	17\18
AZM19	11\12	8\14	9\10	12\13	13\16	29\30	20\20	15\17	10\11	8\10	14\15	21\21	5.3\7.3	9\10	15\18
AZM20	10\12	8\8	10\12	13\16	13.2\14	29\30	25\25	16\17	9\11	8\8	12\13	21\21	8.3\9.3	8\11	16\17
AZM21	8\11	12\12	12\12	11\15	14\14	29\29	20\22	16\17	11\11	11\12	14\15	21.2\24	8.3\9.3	8\8	17\17
AZM22	11\12	8\13	9\12	13\13	15\17	29\29	17\20	15\16	10\11	10\12	10\10	22\24	8.3\10	8\11	16\16
AZM23	12\12	8\11	11\12	14\21	15\16.2	28\32.2	17\23	16\17	9\12	9\10	12\13	20\24	5.3\6.3	8\9	14\18
AZM24	12\12	11\14	10\10	13\13	14\16	29\29	17\17	14\17	11\12	10\10	11\15	22\25	5.3\5.3	8\8	16\18
AZM25	12\12	11\11	11\11	12\14	13.2\17	31.2\32.2	19\20	15\15	11\12	8\12	11\16	23\26	5.3\6.3	8\8	17\17
AZM26	11\12	12\13	11\12	13\16	13\13	29\31.2	16\17	16\17	11\11	10\12	11\11	23\25	10\10	8\11	17\18
AZM27	11\12	8\10	11\12	12\15	13\14	29\32.2	19\20	15\17	11\12	9\10	12\13	21\23	6.3\8	8\8	16\17
AZM28	12\12	12\13	11\11	16\16	13\15.2	30\30	17\19	15\15	11\12	8\8	15\16	23\25	5.3\5.3	8\8	15\17
AZM29	11\11	12\13	10\11	13\14	11\13.2	29\33.2	25\25	16\17	10\12	9\13	12\15	19\20	5.3\9.3	8\9	16\17
AZM30	11\12	13\14	10\11	12\13	13\15.2	29\33.2	17\20	15\17	11\13	8\8	13\15	22\24	6\9.3	8\9	15\17
AZM31	10\11	13\14	11\12	13\14	12\12	32.2\33.2	16\18	16\17	12\12	10\12	12\15	23\25	5.3\6.3	8\11	16\18
AZM32	12\12	11\14	11\11	13\15	14\15	30\31.2	17\19	15\16	11\11	8\10	13\14	24\24	7\7	8\10	17\18
AZM33	12\12	13\14	10\14	13\13	13\17	31\32.2	17\17	15\18	11\11	10\12	12\15	22\22	5.3\6.3	9\11	14\18
AZM34	12\12	12\13	9\10	13\17	14\16	28\29	17\24	16\19	12\14	11\12	11\12	21\21.2	6\7.3	9\10	15\18
AZM35	11\13	12\14	11\11	13\13	12\16.2	29\29	17\18	18\18	12\12	10\11	12\15	23\24	8\9.3	8\10	16\16
AZM36	11\12	11\12	10\11	16\18	14\15	31\32.2	20\22	15\18	12\13	8\12	13\16	20\24	7\8.3	6\10	18\18
AZM37	10\11	11\13	11\12	15\15	13\15	30\30	18\20	14\15	10\11	8\10	11\11	23\23	5.3\8.3	8\10	16\16

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Haplotype Number	CSF1PO	D13S317	D16S539	D18S51	D19S433	D21S11	D2S1338	D3S1388	D5S818	D7S820	D8S1179	FGA	TH01	TPOX	vWA
MUT2	12\12	9\11	9\12	12\21	15\15.2	28\29	19\20	14\14	11\13	9\9	12\15	22\23	5.3\6.3	8\11	16\16
MUT3	10\10	12\12	11\11	12\19	15.2\16	30\30	17\19	14\14	11\12	8\8	12\15	20\20.2	5.3\7.3	9\11	17\18
MUT4	11\11	11\12	9\12	16\19	13\15	29\29	17\20	16\17	12\12	8\12	14\15	20\25	5.3\6.3	9\11	16\17
MUT5	10\12	11\12	12\12	13\17	15\15.2	28\31.2	17\17	15\15	11\11	9\10	15\15	23\24	5.3\8.3	8\9	15\15
MUT6	10\10	8\8	11\11	14\14	13\15	28\32.2	17\24	16\16	12\13	10\11	14\16	20\25	7.3\8.3	11\11	17\18
MUT7	10\10	8\8	11\12	12\17	11\14.2	23.2\31.2	18\18	16\17	12\12	9\11	12\15	20\20.2	8.3\8.3	8\9	16\17
MUT8	10\10	11\11	11\12	14\15	15.2\16	29\30	17\23	15\16	12\13	10\11	12\14	24\24	7.3\7.3	11\11	16\17
MUT9	10\11	8\9	12\12	13\17	13\13	28\29	20\20	15\17	10\12	7\8	10\15	23\24	6.3\9.3	9\9	16\19
MUT10	12\12	10\11	11\13	15\15	14\15	30\34.2	17\18	17\18	10\11	9\11	13\16	18\22	9.3\9.3	8\9	16\17
MUT11	10\11	12\13	11\12	12\12	14\15	30\30	20\20	15\20	12\13	12\13	11\13	21\24	6.3\8.3	9\11	17\18
MUT12	12\13	9\12	9\11	17\19	15\16	28\29	17\17	15\15	13\13	8\9	13\14	23\23	5.3\7.3	8\8	16\17
MUT13	10\13	8\11	11\11	13\16	12\15	30\32.2	19\19	15\17	11\12	10\11	11\12	21\22	7.3\8.3	8\9	15\18
MUT14	10\12	9\13	11\12	14\15	12\15	28\33.2	20\20	14\16	10\13	8\13	9\14	20\27	6.3\8.3	8\8	14\15
MUT15	10\10	8\12	11\11	14\15	14\16	30\30	20\24	15\17	9\10	10\11	13\14	25\25	7.3\8.3	8\8	14\16
MUT16	12\13	12\13	11\12	12\13	12\17	32.2\32.2	17\19	16\17	11\12	11\13	12\15	23\24	5.3\8.3	8\8	17\19
MUT17	10\12	12\12	11\13	12\14	16\16	30\31	17\20	15\16	10\12	10\13	12\13	20\20.2	5.3\7.3	8\9	17\19
MUT18	10\10	11\11	9\9	13\14	13\14	29\32.2	17\17	16\17	11\11	11\13	11\14	20\20	5.3\8.3	8\8	17\17
MUT19	12\13	12\13	9\12	15\16	13\14	29\29	18\23	16\16	12\13	8\10	14\14	21\21	6.3\9.3	8\11	15\16
MUT20	10\10	12\12	8\13	16\17	13\15.2	28\30	19\20	15\17	8\13	10\12	10\11	21\22	5.3\5.3	11\11	16\17
MUT21	10\10	11\13	11\13	13\16	12\15	28\28	17\20	15\16	8\11	12\12	15\17	19\24	5.3\8.3	8\9	17\18
MUT22	11\12	12\13	12\12	15\18	15\16.2	28\33.2	18\24	17\18	10\12	8\11	11\14	19\20	9.3\9.3	11\11	16\16
MUT23	10\12	11\11	11\12	15\19	14\15	30\30	19\23	14\15	11\11	10\11	13\13	23\24	7.3\7.3	8\8	17\18
MUT24	10\10	11\12	12\12	13\15	13\16	30\30	17\20	14\14	11\13	11\11	14\14	19\24	5.3\5.3	8\9	17\18
MUT25	10\12	8\12	11\11	13\15	14\15	29\30	17\17	16\17	11\12	10\12	14\15	18\24	5.3\8.3	9\11	14\18
MUT26	12\12	11\12	12\12	13\13	14\15	29\32.2	18\23	15\16	9\11	10\12	12\14	22\25	5.3\9.3	10\10	15\19
MUT27	11\12	12\12	8\13	13\16	15\15	29\32.2	16\19	16\16	12\12	10\12	11\12	24\26	5.3\5.3	8\9	17\19
MUT28	11\12	8\9	9\11	13\17	14\16	29\29	17\20	14\15	10\13	8\10	13\13	21\23	7.3\8.3	8\11	16\18
MUT29	12\12	12\12	10\12	17\19	12\15.2	33.2\33.2	17\17	15\17	11\12	8\10	12\15	21\24	5.3\6.3	9\11	17\18
MUT30	12\12	12\12	8\12	13\17	13\13	29\32.2	19\22	15\16	12\13	9\10	11\14	24\26	5.3\9.3	8\11	16\16

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Haplotype Number	CSF1PO	D13S317	D16S539	D18S51	D19S433	D21S11	D2S138	D3S1388	D5S818	D7S820	D8S1179	FGA	TH01	TPOX	vWA
ANZ2	12\13	11\12	8\13	13\13	13\13	29\30	20\23	15\17	11\13	10\11	15\16	22\24	7\10	8\9	17\19
ANZ3	11\11	8\11	13\14	15\17	13\15	28\28	19\19	15\18	12\12	9\10	10\14	22\24	6\6	9\11	14\16
ANZ4	11\12	11\11	9\12	10\12	12\14	27\32.2	18\20	15\16	12\13	9\10	13\15	21\22	6\9	8\8	14\16
ANZ5	11\11	8\10	10\10	14\17	13\14	31.2\32.2	17\18	15\17	11\12	7\12	12\15	24\28	7\8	8\8	16\16
ANZ6	10\12	11\13	9\9	15\18	14\15	29\29	19\21	15\16	9\12	8\11	14\15	20\23	9\10	9\11	16\19
ANZ7	12\12	11\13	11\12	13\17	13\15.2	29\30	17\19	15\16	11\12	9\11	11\16	21\24	7\8	8\11	16\16
ANZ8	10\11	12\13	11\12	13\14	13.2\15	29\30	19\23	12\15	10\11	9\11	15\16	21\23	8\9	11\12	17\20
ANZ9	10\12	8\11	10\11	11\11	15.2\15.2	30\31.2	20\27	15\16	13\13	10\11	10\13	24\24	7\9	8\8	18\18
ANZ10	12\12	12\12	12\13	12.2\14	12.2\14	28\29	17\20	15\15	8\11	8\11	10\15	21\22	6\7	8\9	18\18
ANZ11	10\11	12\12	11\12	12\12	13\15.2	29\30	20\20	15\16	9\13	10\11	15\15	20\20.2	7\9	8\8	15\18
ANZ12	11\11	11\14	12\12	14\16	13\15	29\30	21\23	14\16	10\11	8\13	15\15	19\23	6\10	8\8	15\18
ANZ13	11\12	10\10	8\13	12\12	16\16	30\31.2	17\20	16\18	13\13	11\11	12\15	22\22	6\6	10\11	17\20
ANZ14	10\12	9\9	11\13	13\17	13\15.2	30\30	20\23	15\16	11\11	11\11	13\30	23\25	6\9	10\12	17\17
ANZ15	12\12	8\14	13\15	13\17	13\15	30\30	17\18	16\16	11\11	8\10	14\15	19\22	6\6	9\11	15\18
ANZ16	11\12	11\12	13\13	14\14	13\15	31.2\31.2	21\24	14\15	11\13	10\12	11\15	22\25	7\10	8\8	15\17
ANZ17	10\12	12\13	10\12	13\16	11\16.2	29\32.2	19\25	18\18	12\12	8\10	15\15	19\25	8\8	8\10	17\19
ANZ18	10\11	11\13	12\12	14\14	13\15	29\29	21\23	14\16	10\11	10\12	13\15	23\23	9\10	8\10	17\18
ANZ19	9\12	9\12	12\12	12\18	14\15.2	30\32.2	17\18	15\16	11\12	10\11	12\14	23\24	9\10	8\11	18\18
ANZ20	10\12	10\12	11\11	13\16	14\16	29\32.2	17\25	15\16	10\12	8\8	13\13	21\23	10\10	8\8	16\17
ANZ21	11\11	8\11	8\12	15\17	16\16	28\30	17\20	17\18	12\13	10\11	12\14	20\25	6\9	11\11	17\20